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C. J. SCHMITT

FOLDING TABLE

Filed March 18, 1925

Fig. 1.

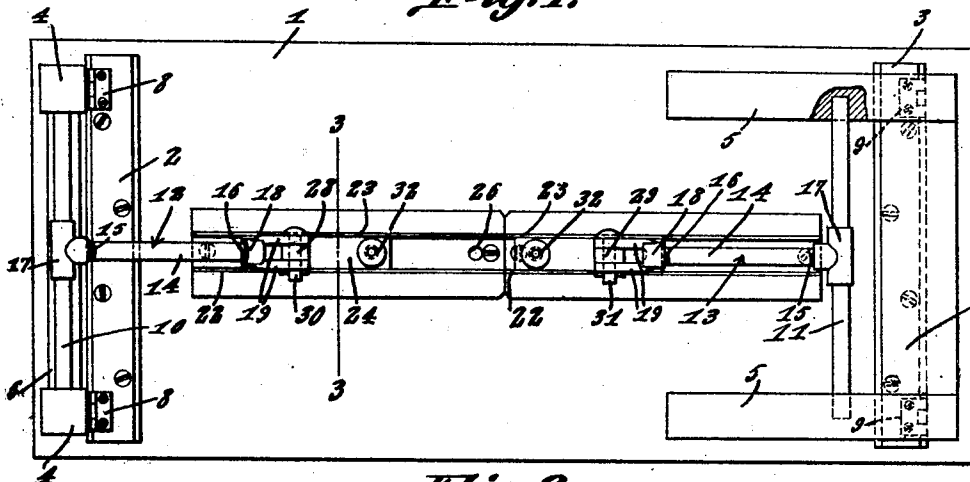


Fig. 2.

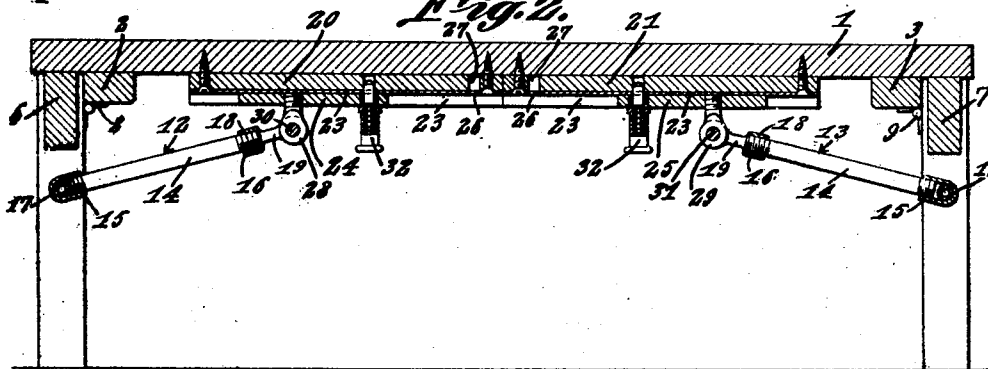


Fig. 4.

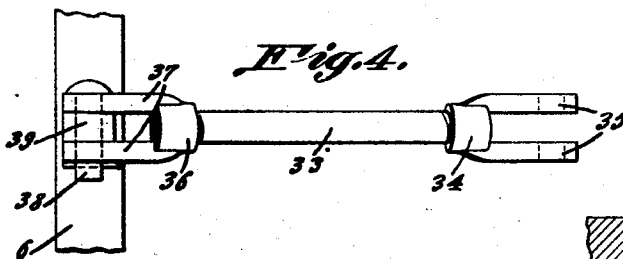


Fig. 3.

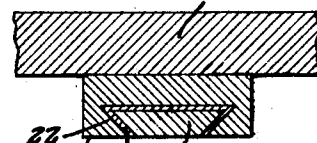


Fig. 5.



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FOLDING TABLE.

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To all whom it may concern:

Be it known that I, CHARLES J. SCHMITT, a citizen of the United States, residing at Algoma, in the county of Kewaunee and State of Wisconsin, have invented certain new and useful Improvements in Folding Tables, of which the following is a specification.

This invention relates to folding tables, and has for its object to provide, in a manner as hereinafter set forth, a table of such class with new and novel means for maintaining the legs thereof in vertical position when extended and for locking the legs in parallelism with respect to the inner face of the table top when the legs are folded.

Further objects of the invention are to provide, in a manner as hereinafter set forth, a folding table, which is simple in its construction and arrangement, strong, durable, compact when folded, conveniently set up and folded when desired, and comparatively inexpensive to manufacture.

With the foregoing and other objects in view, the invention consists of the novel construction, combination and arrangement of parts, as hereinafter more specifically described and illustrated in the accompanying drawings, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which come within the scope of the claims hereunto appended.

In the drawings wherein like reference characters denote corresponding parts throughout the several views:—

Figure 1 is a bottom plan of a folding table, in accordance with this invention, with the legs at one end of the table extended and the legs at the other end folded.

Figure 2 is a longitudinal sectional view of the table with the legs thereof extended.

Figure 3 is a section on line 3—3, Figure 1.

Figure 4 is a fragmentary view, in plan, of a modified form of a combined brace and coupling element.

Figure 5 is a longitudinal sectional view of the form shown in Figure 4.

Referring to the drawings in detail, 1 denotes the top of the table, which preferably is of rectangular contour. Secured to the inner face of the top 1 is a pair of transversely extending cleats or brace members 2, 3, which are arranged at a substantial distance from, but in proximity to the ends of

the top 1. Each of the said cleats is of a length less than the width and has its ends positioned inwardly with respect to the side edges of the top 1.

Two pair of supporting legs are provided for supporting the top 1. The legs of one pair are indicated at 4 and those of the other at 5. The pairs of legs 4, 5, are connected together at their upper ends by the combined brace and coupling bars 6, 7, respectively and which are flush with the upper end edges of the legs. The pairs of legs 4, 5, are connected to the cleats 2, 3 by the pairs of hinges 8, 9, respectively. When the pairs of legs 4, 5 are extended they abut against the outer sides of the cleats and the inner face of the top 1 and further are flush with the end edges of the latter.

Arranged between and secured to the pairs of legs 4, 5 are the brace rods 10, 11 respectively and upon each of said rods is pivotally mounted a combined brace and coupling element and which are referred to generally by the reference characters 12, 13 and extend in opposite directions with respect to each other.

Each of said elements consists of a tubular bar 14 of the desired length having peripheral threads 15 at one end and peripheral threads 16 at the other end thereof. Threadedly engaging with the threads 15 is a T-coupling 17 through which extends a brace rod 10 or 11, and upon the latter the element pivots.

Threadedly engaging with the threads 16 is a collar 18 provided with a pair of opposed rearwardly extending apertured arms 19.

Secured to the inner face of the top 1, at the longitudinal center thereof, is a pair of lengthwise aligning bars 20, 21 abutting at their opposed ends and having their outer ends spaced from the cleats 2, 3. The lower face of each of the bars 20, 21 is provided throughout with a dove-tail groove 22. Mounted in each of the grooves 22 is an inverted channel-shaped metallic casing 23 of the same length and contour as the length and shape of the groove, and which provides a combined guide and connecting means for a slidable rectangular combined guide and coupling block. The blocks are indicated at 24, 25, and each associates with the element 12 and the latter with the element 13. The sides of each block are bey-

elled to conform to the shape of the sides of the casing 23, in which the block is mounted.

The top of each of the casings 23, as well as each of the bars 20, 21, near the inner end thereof, is formed with an opening, as indicated at 26, 27, respectively. The openings 26 register with the openings 27. The purpose of the registering openings will be presently referred to.

The blocks 24, 25, between their transverse center and outer ends, have depending therefrom eye bolts 28, 29 respectively. To the eye bolt 28, is pivotally connected, as at 30, the arms 19 of the element 12, and the arms 19 of the element 13 are pivotally connected to the eye bolt 29, as at 31.

Carried by the blocks 24, 25, at the inner end thereof, is a spring controlled latching device 32, which operates through an opening in the block and frictionally engages with the top of a casing 23 to maintain a pair of legs in position when extended. The latching device 32 is further adapted to engage in registering openings 26, 27, for locking a pair of legs in folded position, that is parallel with the inner face of the top 1.

In the modification shown in Figures 4 and 5, the rods 10, 11 and the T-couplings 17 are dispensed with. The combined brace and coupling element consists of a tubular bar 33, of the desired length provided at each end with peripheral threads. Threadedly engaging with the inner end of the bar 33 is a collar 34 provided with a pair of opposed rearwardly extending apertured arms 35 adapted to be pivotally connected to an eye bolt carried by a block 24 or 25. Threadedly engaging with the outer end of the bar 32 is a collar 36 formed with a pair of opposed outwardly extending apertured arms 37 which are pivotally connected, as at 38, to an eye bolt 39, secured to a combined brace and coupling bar 6 or 7. Otherwise than that as stated, the construction of the table will be the same as referred to in connection with Figures 1, 2 and 3.

When a pair of legs is extended, the latching device 32 frictionally engaging with the top of a casing 23 will maintain the legs in such position. When it is desired to fold the legs, the latching device is pulled from engagement with the casing 23 and the slidable block shifted inwardly which carries a combined brace and coupling element therewith, swinging the legs inwardly, and as the block is shifted towards the inner

end of a casing 23, the latching device will eventually oppose a pair of registering openings so that the latching bolt will engage in said registering openings and will lock the legs in folded position.

It is thought that the many advantages of a folding table, in accordance with this invention, can be readily understood, and although the preferred embodiment of the invention is as illustrated and described, yet it is to be understood that changes in the details of construction can be had which will fall within the scope of the invention as claimed.

What I claim is:—

1. A folding table comprising a top, two pairs of end legs, means for coupling each pair of legs together, a pair of cleats secured to the inner face of said top, means for hinging the legs of each pair at a point removed from their upper ends to the lower face of a cleat, a pair of slidable oppositely movable combined guide and coupling blocks, means arranged at the longitudinal center of the inner face of said top for slidably connecting said blocks thereto, oppositely extending combined brace and coupling elements pivotally connected to said legs, means depending from said blocks for pivotally connecting said elements therewith, and latching devices carried by said blocks and coacting with said first mentioned connecting means for maintaining the legs extended and locked when folded.

2. A folding table comprising a top, a spaced pair of cleats secured to the inner face of said top at points adjacent the ends thereof, two pairs of end legs, each pair arranged outwardly with respect to a cleat, means for hinging the legs of each pair in proximity to their upper ends to a cleat, a pair of slidable, oppositely movable, apertured, combined guide and coupling blocks, means secured to the inner face of the top, between the cleats for slidably connecting the blocks to the top and provided with openings adapted to register with the apertures in the blocks, oppositely extending combined brace and coupling elements pivotally connected to said legs, means extending from said blocks for pivotally connecting said elements therewith, and latching devices carried by said blocks and selectively coacting with said openings and apertures for maintaining the legs extended and locked when folded.

In testimony whereof, I affix my signature hereto.

CHARLES J. SCHMITT.